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Access DB#

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62785 Date: 4-6-2004
. I/ C. I DI NINIL M. 200 COL NO AG (A NORMAL NUMBEL 161 () S.C. N. N
Mail Box and Bldg/Room Location: Results Format Preferred (circle): PAPER DISK E-MAIL
(LEM 2 MI (m. Nov) 3D19 (ottice)
if more than one search is submitted, please prioritize searches in order of need.
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.
Title of Invention: Radiolabeled Mammalian Tachykinin Peptide Analogue
Inventors (please provide full names): P. Armus
Earliest Priority Filing Date:
For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.
Please search SEQ ID NO:1 (FX GLM) in STN,
in the U.S. patest application sequence database (pending, published,
and irrued and in Genesey Swisspret PIR. Please require any
hits to have 15 or fewer residues.
Prak you.
J3R

(FILE 'REGISTRY' ENTERED AT 14:59:16 ON 07 APR 2004) L5 4109 S F[FIV]GLM/SQSP L6 2407 S L5 AND SQL=<15 FILE 'HCAPLUS' ENTERED AT 15:00:15 ON 07 APR 2004 L5 4109 SEA FILE=REGISTRY ABB=ON PLU=ON F[FIV]GLM/SQSP L6 2407 SEA FILE=REGISTRY ABB=ON PLU=ON L5 AND SQL=<15 14575 SEA FILE=HCAPLUS ABB=ON PLU=ON L6 L7 L9 113 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 AND (RADIOLABEL? OR RADIO LABEL?) L10 51 SEA FILE=HCAPLUS ABB=ON PLU=ON L9 AND TACHYKININ L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L10 AND MAMMAL? L16 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN Entered STN: 03 Sep 2002 ACCESSION NUMBER: 2002:662100 HCAPLUS DOCUMENT NUMBER: 138:19555 TITLE: Central neuropeptide systems and respiratory control during development AUTHOR(S): Moss, Immanuela Rave; Laferriere, Andre CORPORATE SOURCE: Development Respiratory Laboratory, The Research Institute of the McGill University Health Centre, Montreal, QC, H3H 1P3, Can. SOURCE: Respiratory Physiology & Neurobiology (2002), 131(1-2), 15-27CODEN: RPNEAV; ISSN: 1569-9048 PUBLISHER: Elsevier Science Ltd. DOCUMENT TYPE: Journal; General Review LANGUAGE: English A review. The substance P/neurotachykinin-1 (NK-1) and the $\mu\text{-opioid}$ G protein-coupled receptor systems endow brain-stem respiratory regions and display discrete developmental patterns. Hypoxia-induced neuropeptide release may increase receptor endocytosis, reducing receptor accessibility to ligands. We wondered whether the attenuated respiratory response to hypoxia of developing piglets after single or repeated daily hypoxic exposure is influenced by differential endocytosis of NK-1 vs. μ -opioid receptors. Whereas the long-term (24 h) response of both receptors to recurrent hypoxia in piglet brainstem is similar, i.e. upregulation, the short-term (5 min) response to single or recurrent hypoxia, albeit in rats, is different: radiolabeled NK-1 receptors are greatly reduced, suggesting enhanced endocytosis, but μ -opioid receptors remain unchanged, implying unaltered endocytosis. If confirmed in piglet brainstem, this difference would produce relatively more available $\mu\text{--opioid}$ receptors to opioid peptides in hypoxia that might contribute to the attenuated respiratory responses to single and repeated hypoxia during development. IT 33507-63-0, Substance P RL: BSU (Biological study, unclassified); BIOL (Biological study) (central neuropeptide systems and respiratory control during development) REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Searcher: Shears 571-272-2528

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L16 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
      Entered STN: 12 Jan 2001
 ACCESSION NUMBER:
                          2001:31364 HCAPLUS
 DOCUMENT NUMBER:
                          134:82815
 TITLE:
                         A radiolabeled mammalian
                          tachykinin peptide analogue
 INVENTOR(S):
                          Ortiz Armua, Pedro
 PATENT ASSIGNEE(S):
                          Spain
 SOURCE:
                         PCT Int. Appl., 12 pp.
                         CODEN: PIXXD2
 DOCUMENT TYPE:
                         Patent
 LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                      KIND
                            DATE
                                           APPLICATION NO. DATE
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                                           -----
     WO 2001002021
                      A2
                            20010111
                                           WO 2000-IB1260
                                                            20000705
     WO 2001002021
                      A3
                            20020207
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             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
             VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH,
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             BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1196200
                      A2 20020417
                                          EP 2000-954837 20000705
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO
     ZA 2002000096
                      A
                           20030404
                                           ZA 2002-96
                                                            20020104
PRIORITY APPLN. INFO.:
                                        ES 1999-1489
                                                         A 19990705
                                        WO 2000-IB1260
                                                       W 20000705
AB
     A radiolabeled mammalian tachykinin
     peptide analog; use of the analog for mammalian in vivo
     tachykinin peptide receptor imaging; and a diagnostic kit
     comprising the analog are described. 99mTc-labeled substance P,
     prepared using 2-iminothiolane as linker, showed good uptake in
     salivary glands of mice.
IT
     33507-63-0DP, Substance P peptide, 99mTc-labeled
     RL: BPR (Biological process); BSU (Biological study, unclassified);
     SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); PROC (Process); USES (Uses)
        (radiolabeled mammalian tachykinin
        peptide analog for diagnostic imaging)
IT
     4846-01-9D, Phe-Ile-Gly-Leu-Met-NH2, radiolabeled
    derivs. 51165-05-0D, Phe-Phe-Gly-Leu-Met-NH2,
    radiolabeled derivs. 86933-74-6D, Neurokinin A,
    radiolabeled 86933-74-6D, Neurokinin A,
    radiolabeled derivs. 86933-75-7D, Neurokinin B
     (swine spinal cord), radiolabeled 89671-31-8D,
    Phe-Val-Gly-Leu-Met-NH2, radiolabeled derivs.
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (radiolabeled mammalian tachykinin
       peptide analog for diagnostic imaging)
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Searcher : Shears 571-272-2528

L16 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 17 Feb 1990

ACCESSION NUMBER: 1990:49215 HCAPLUS

DOCUMENT NUMBER: 112:49215

TITLE: Identification of immunoreactive substance P in

human and other mammalian endothelial

cells

AUTHOR(S): Linnik, Matthew D.; Moskowitz, Michael A. CORPORATE SOURCE: Neurol. Neurosurg. Serv., Massachusetts Gen.

Hosp., Boston, MA, 02114, USA

SOURCE: Peptides (New York, NY, United States) (1989),

10(5), 957-62

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE:

Journal LANGUAGE: English

The existence of the vasodilatory tachykinin substance P within endothelial cell scrapings from human, rat, and dog thoracic aorta and human pial arteries with values ranging from 1.0 (rat aorta) to 1.9 (dog aorta) fmol/mg protein is described. The immunoreactive component eluted with a retention time identical to that of radiolabeled substance P when analyzed by HPLC combined with RIA. Cultured endothelial cells from bovine cerebral microvessels contained measurable levels of substance P in passages 3-8, suggesting the likelihood that these cells synthesize substance P. However, the level of gene expression must be low since efforts to demonstrate the presence of preprotachykinin mRNA by Northern blot anal. of dog and rat aortic endothelial cell RNA or by RNase protection anal. of rat aortic endothelial cell RNA were not successful.

IT 33507-63-0, Substance P RL: BIOL (Biological study)

(in vascular endothelium, of humans and other mammals)

L16 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 30 Apr 1989

ACCESSION NUMBER: 1989:148516 HCAPLUS

DOCUMENT NUMBER: 110:148516

TITLE: Substance P and substance K receptor binding

sites in the human gastrointestinal tract:

localization by autoradiography

AUTHOR(S): Gates, T. S.; Zimmerman, R. P.; Mantyh, C. R.; Vigna, S. R.; Maggio, J. E.; Welton, M. L.;

Passaro, E. P., Jr.; Mantyh, P. W.

CORPORATE SOURCE: Cent. Ulcer Res. Educ., VA Med. Cent. Wadsworth,

Los Angeles, CA, 90073, USA

SOURCE: Peptides (New York, NY, United States) (1988),

9(6), 1207-19

CODEN: PPTDD5; ISSN: 0196-9781

DOCUMENT TYPE: Journal English

Quant. receptor autoradiog. was used to localize and quantify the distribution of binding sites for 125I-radiolabeled substance P (SP), substance K (SK) and neuromedin K (NK) in the human gastrointestinal (GI) tract using histol. normal tissue obtained from uninvolved margins of resections for carcinoma. The

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distribution of SP and SK binding sites is different for each gastrointestinal segment examined Specific SP binding sites are expressed by arterioles and venules, myenteric plexus, external circular muscle, external longitudinal muscle, muscularis mucosa, epithelial cells of the mucosa, and the germinal centers of lymph nodules. SK binding sites are distributed in a pattern distinct from SP binding sites and are localized to the external circular muscle, external longitudinal muscle, and the muscularis mucosa. Binding sites for NK were not detected in any part of the human GI tract. Thus, surgical specimens from the human GI tract can be effectively processed for quant. receptor autoradiog. Of the 3 mammalian tachykinins tested, SP and SK, but not NK, binding sites are expressed in detectable levels in the human GI tract. Although SK receptor binding sites are expressed almost exclusively by smooth muscle, SP binding sites are expressed by smooth muscle cells, arterioles, venules, epithelial cells of the mucosa and cells associated with lymph nodules; both SP and SK binding sites expressed by smooth muscle are more stable than are SP binding sites expressed by blood vessels, lymph nodules, and mucosal cells. **86933-75-7**, Neuromedin K RL: PROC (Process) (binding of, by gastrointestinal tract of human) 33507-63-0, Substance P 86933-74-6

IT

RL: BIOL (Biological study)

(receptors for, of gastrointestinal tract of human, localization of)

ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

Entered STN: 01 Nov 1986

ACCESSION NUMBER: 1986:546964 HCAPLUS

DOCUMENT NUMBER: 105:146964

TITLE:

SOURCE:

Characterization of a neurokinin B receptor site

in rat brain using a highly selective

radioligand

AUTHOR(S): Laufer, Ralph; Gilon, Chaim; Chorev, Michael;

Selinger, Zvi

CORPORATE SOURCE: Otto Loewi Cent. Neurobiol., Inst. Life Sci.,

Jerusalem, 91904, Israel

Journal of Biological Chemistry (1986), 261(22), 10257-63

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: LANGUAGE:

Journal English

A tachykinin receptor subtype (SP-N), whose preferred ligand is the mammalian neuropeptide neurokinin B [86933-75-7], was investigated with the radiolabeled peptide 5-11-N α -([1251]desamino-3-iodotyrosyl)-[Asp5,6-Nmethyl-Phe8]-substance P (I) [104499-96-9], which selectively interacts with the SP-N receptor subtype. The binding of I to rat cerebral cortex membranes was studied under conditions that minimized nonspecific binding. Unlike other tachykinin receptor probes, this radioligand is not degraded during the binding experiment Binding of I is reversible, saturable, and of high affinity (dissociation constant = 0.9 nM). The radioligand labels a single class of binding site (122 fmol binding sites/mg of protein), as indicated by a linear Scatchard plot and a Hill coefficient close to unity (1.05).

The pharmacol. specificity of this binding site corresponds to that of the neuronal SP-N receptor in guinea pig ileum myenteric plexus, which was determined by a functional bioassay. Among various rat brain regions, the highest binding was observed in the cerebral cortex, olfactory bulb, hypothalamus, and hippocampus. The results suggest the existence and specific distribution of a neurokinin B receptor site of the SP-N type in rat brain. I is the 1st selective and potent probe for this receptor and is thus an important tool for further studies of its distribution, regulation, and functional role.

IT 103445-39-2

RL: PROC (Process)

(neurokinin B receptor binding of, in brain)

IT 104499-96-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and neurokinin B receptor characterization with)

IT 104499-97-0

RL: PROC (Process)

(radioiodination and neurokinin B receptor binding of)

IT 86933-75-7

RL: BIOL (Biological study)

(receptor for, of brain, selective probe for)

E1 THROUGH E9 ASSIGNED

FILE 'REGISTRY' ENTERED AT 15:07:34 ON 07 APR 2004

9 SEA FILE=REGISTRY ABB=ON PLU=ON (33507-63-0/BI OR 86933-74-6/BI OR 86933-75-7/BI OR 103445-39-2/BI OR 104499-96-9/BI OR 104499-97-0/BI OR 4846-01-9/BI OR 51165-05-0/BI OR 89671-31-8/BI)

=> s 118 and 15

L20 9 L18 AND L5

L20 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 104499-97-0 REGISTRY

CN L-Methioninamide, L-α-aspartyl-L-α-aspartyl-L-phenylalanyl-N-methyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Aminosenktide

SQL 7

SEQ 1 DDFFGLM

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HITS AT: 3-7

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 135:298650

REFERENCE 2: 130:119984

REFERENCE 3: 130:20972

Searcher : Shears 571-272-2528

REFERENCE 4: 129:131634 REFERENCE 5: 125:318273 REFERENCE 120:210557 6: REFERENCE 7: 120:46561 REFERENCE 8: 120:24074 REFERENCE 9: 118:205901 REFERENCE 10: 118:33494 L20 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN 104499-96-9 REGISTRY L-Methioninamide, N-[3-[4-hydroxy-3-(iodo-125I)phenyl]-1-oxopropyl]- $\texttt{L-}\alpha - \texttt{aspartyl-L-}\alpha - \texttt{aspartyl-L-} \\ \texttt{phenylalanyl-N-methyl-L-}$ phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME) SQL SEQ 1 DDFFGLM ==== HITS AT: 3-7 **RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 105:146964 L20 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN RN103445-39-2 REGISTRY L-Methioninamide, 5-oxo-L-prolyl-L-phenylalanyl-N-methyl-L-CN phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME) SQL SEO 1 XFFGLM ==== HITS AT: 2-6 **RELATED SEQUENCES AVAILABLE WITH SEQLINK** REFERENCE 1: 130:25326 REFERENCE 119:181203 REFERENCE 3: 110:166270 REFERENCE 4: 109:205353 REFERENCE 5: 109:17666 REFERENCE 6: 107:229502 REFERENCE 7: 106:150010 REFERENCE 8: 105:146964

Searcher : Shears 571-272-2528

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REFERENCE
             9: 105:57318
 L20 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN
      89671-31-8 REGISTRY
      L-Methioninamide, L-phenylalanyl-L-valylglycyl-L-leucyl- (9CI) (CA
 CN
      INDEX NAME)
 OTHER NAMES:
      6-10-Neurokinin \alpha
      Phe-Val-Gly-Leu-Met-NH2
 CN
 CI
      COM
 SQL 5
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                122:151508
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REFERENCE
             5: 121:108267
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             6: 116:121078
            7: 113:224635
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            8: 104:168810
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            9:
                104:142380
REFERENCE 10: 103:196387
L20 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
     86933-75-7 REGISTRY
     Neurokinin B (swine spinal cord) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Kassinin, 2-L-methionine-3-L-histidine-4-de-L-lysine-5-de-L-serine-7-
     L-phenylalanine-
OTHER NAMES:
     L-Methioninamide, L-\alpha-aspartyl-L-methionyl-L-histidyl-L-
     \alpha-aspartyl-L-phenylalanyl-L-phenylalanyl-L-valylglycyl-L-
     leucyl-
CN
     Neurokinin \beta
CN
     Neurokinin \beta (pig spinal cord)
     Neurokinin B (human)
CN
CN
     Neurokinin B (pig spinal cord)
CN
     Neurokinin B (porcine)
CN
     Neuromedin K
     Neuromedin K (pig spinal cord)
CN
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Shears

571-272-2528

Searcher :

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CN
                  Porcine neurokinin B
   CN
                  Zneurok1 (human)
   CI
                  COM
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 REFERENCE 10: 139:208098
 L20 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN
                86933-74-6 REGISTRY
                Neurokinin A (swine spinal cord) (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
                Kassinin, 1-de-L-aspartic acid-2-de-L-valine-3-L-histidine-5-L-
                threonine-7-L-serine-
OTHER NAMES:
               L-Methionina mide, \ L-histidyl-L-lysyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-\alpha-aspartyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threonyl-L-threon
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CN
               Neurokinin \alpha
CN
               Neurokinin \alpha (pig spinal cord)
CN
               Neurokinin \alpha (porcine)
CN
               Neurokinin A
               Neurokinin A (alligator)
CN
               Neurokinin A (pig spinal cord)
               Neurokinin A (\bar{P}ython molurus)
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CN
               Neuromedin L
               Neuromedin L (pig spinal cord)
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Searcher: Shears 571-272-2528

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RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 140:229875

REFERENCE 2: 140:193438

REFERENCE 3: 140:193061

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REFERENCE 7: 140:140827

REFERENCE 8: 140:123112

REFERENCE 9: 140:107276

REFERENCE 10: 140:71486

L20 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 51165-05-0 REGISTRY

CN L-Methioninamide, L-phenylalanyl-L-phenylalanylglycyl-L-leucyl- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 7-11-Substance P

CN Phe-Phe-Gly-Leu-Met-NH2

CN Substance P pentapeptide

CI COM

SQL 5

SEQ 1 FFGLM

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HITS AT: 1-5

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REFERENCE 3: 138:21218

REFERENCE 4: 137:195720

REFERENCE 5: 136:366698

REFERENCE 6: 136:260222

REFERENCE 7: 136:227036

REFERENCE 8: 135:283312

Searcher : Shears 571-272-2528

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REFERENCE
             9: 134:82815
 REFERENCE 10: 133:190228
L20 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN
      33507-63-0 REGISTRY
CN
      Substance P (9CI) (CA INDEX NAME)
OTHER NAMES:
     1: PN: US20020037833 SEQID: 1 unclaimed sequence
CN
      21: PN: WO0181408 SEQID: 44 claimed protein
CN
CN
     690: PN: WO2004005342 PAGE: 46 claimed protein
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     Substance P (1-11)
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     Substance P (peptide)
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                140:230888
REFERENCE 10:
                140:229887
L20 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN
     4846-01-9 REGISTRY
CN
     L-Methioninamide, L-phenylalanyl-L-isoleucylglycyl-L-leucyl- (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
    Methioninamide, L-phenylalanyl-L-isoleucylglycyl-L-leucyl-, L- (7CI)
CN
CN
     Phyllomedusin, 1-de(5-oxo-L-proline)-2-de-L-asparagine-3-de-L-
    proline-4-de-L-asparagine-5-de-L-arginine- (8CI)
OTHER NAMES:
```

Searcher: Shears 571-272-2528

CN Eledoisin(7-11)

CN Phe-Ile-Gly-Leu-Met-NH2

CI COM

SQL 5

SEQ 1 FIGLM

=====

HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:82815

REFERENCE 2: 124:165481

REFERENCE 3: 122:151508

REFERENCE 4: 113:224635

REFERENCE 5: 112:51088

REFERENCE 6: 99:116778

REFERENCE 7: 91:21126

REFERENCE 8: 90:204506

REFERENCE 9: 88:23378

REFERENCE 10: 77:13876

FILE 'HOME' ENTERED AT 15:08:24 ON 07 APR 2004

OM protein - protein search, using sw model

April 7, 2004, 09:21:32; Search time 39 Seconds Run on:

(without alignments)

40.451 Million cell updates/sec

Title: US-10-030-388A-1

Perfect score: 22

Sequence: 1 FXGLM 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 3954

Minimum DB seq length: 0 Maximum DB seq length: 15

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : SPTREMBL 25:*

1: sp_archea:*
2: sp_bacteria:*

3: sp_fungi:*

4: sp_human:*

5: sp_invertebrate:*

6: sp_mammal:*

7: sp_mhc:*
8: sp_organelle:*

9: sp_phage:*

10: sp plant:*

11: sp rodent:*

12: sp_virus:*

13: sp vertebrate:*

14: sp_unclassified:*

15: sp_rvirus:*

16: sp bacteriap:*

17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result Query

No. Score Match Length DB ID

용

Description

_				
1	20	90.9	11 5 Q9UAR8	Q9uar8 aedes aegyp
2	18	81.8	15 11 Q924T1	Q924t1 rattus norv
3	15	68.2	10 8 Q35013	Q35013 meloidogyne
4	15	68.2	14 8 Q8M099	Q8m099 tockus nasu
5	15	68.2	15 8 Q9XLJ8	Q9x1j8 grus leucog
6	15	68.2	15 8 Q9TH03	OO+bO3
7	14	63.6	15 2 Q9R541	Q9th03 grus paradi
8	13	59.1	11 2 Q9R446	Q9r541 mycobacteri
9	12	54.5	_	Q9r446 neisseria g
10	12	54.5		P82079 limnodynast
11	12	54.5	2	Q8mjn1 cebuella py
12	12		9 6 Q8MJN6	Q8mjn6 aotus azara
13		54.5	9 6 Q8MJN8	Q8mjn8 cebus apell
	12	54.5	9 6 Q8MJN2	Q8mjn2 callithrix
14	12	54.5	9 6 Q8MJN9	Q8mjn9 ateles fusc
15	12	54.5	9 6 Q8MJN5	Q8mjn5 saguinus fu
16	12	54.5	9 6 Q8MJN3	Q8mjn3 callimico g
17	12	54.5	9 6 Q8MJN7	Q8mjn7 saimiri sci
18	12	54.5	9 6 Q8MJN4	Q8mjn4 leontopithe
19	12	54.5	9 15 Q 85599	Q85599 moloney mur
20	12	54.5	10 5 Q25356	Q25356 locusta mig
21	12	54.5	10 5 Q25355	Q25355 locusta mig
22	12	54.5	10 13 P82080	P82000 limmadaman
23	12	54.5	10 13 P82084	P82080 limnodynast
24	12	54.5	11 6 Q9TRX0	P82084 limnodynast
25	12	54.5	11 7 077872	Q9trx0 sus scrofa
26	12	54.5		077872 oreochromis
27	12	54.5		077873 oreochromis
28	12			077871 oreochromis
29		54.5	12 2 Q53183	Q53183 rhodococcus
	12	54.5	12 2 Q93UU4	Q93uu4 escherichia
30	12	54.5	12 6 Q9N2B9	Q9n2b9 gorilla gor
31	12	54.5	12 6 Q9N2B8	Q9n2b8 pongo pygma
32	12	54.5	12 6 Q9N2C0	Q9n2c0 pan troglod
33	12	54.5	12 6 P83127	P83127 bos indicus
34	12	54.5	12 10 Q9SYT4	Q9syt4 arabidopsis
35	12	54.5	12 10 Q02320	Q02320 pinus sylve
36	12	54.5	12 10 Q38715	Q38715 arachis hyp
37	12	54.5	12 10 Q02319	Q02319 pinus sylve
38	12	54.5	12 11 054970	O54970 mus musculu
39	12	54.5	12 13 P82085	
40	12	54.5	13 4 Q9UDE0	P82085 limnodynast
41	12	54.5	13 4 Q96PIO	Q9udeO homo sapien
42	12	54.5	13 5 Q9U5J2	Q96pi0 homo sapien
43	12	54.5	13 7 Q9TNQ8	Q9u5j2 trypanosoma
44	12	54.5	- ~	Q9tnq8 homo sapien
45	12	54.5		P82848 rana pipien
46	12		14 2 P96350	P96350 legionella
47		54.5	14 4 Q8IWS6	Q8iws6 homo sapien
	12	54.5	14 10 P82327	P82327 pisum sativ
48	12	54.5	14 12 Q8V1H7	Q8v1h7 hepatitis b
49	12	54.5	14 13 P82831	P82831 rana luteiv
50	12	54.5	14 13 P82832	P82832 rana luteiv
51	12	54.5	15 2 Q9X637	Q9x637 klebsiella
52	12	54.5	15 2 Q46013	Q46013 caulobacter
53	12	54.5	15 2 Q9X635	Q9x635 escherichia
54	12	54.5	15 4 Q9UQA5	Q9uqa5 homo sapien
55	12	54.5	15 4 Q9BXQ0	Q9bxq0 homo sapien
56	12	54.5	15 5 Q27266	Q27266 trypanosoma
57	12	54.5	15 6 Q8WNQ2	Osuma? and
			- C KOUNKE	Q8wnq2 sus scrofa

```
RESULT 1
Q9UAR8
ID
     Q9UAR8
                 PRELIMINARY;
                                   PRT;
                                           11 AA.
AС
     Q9UAR8;
DT
     01-MAY-2000 (TrEMBLrel. 13, Created)
     01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT
DT
     01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE
     Sialokinin I preproprotein (Fragment).
OS
     Aedes aegypti (Yellowfever mosquito).
     Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
OC
     Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Aedes.
OC
OX
     NCBI TaxID=7159;
RN
     [1]
RP
     SEQUENCE FROM N.A.
RC
     STRAIN=Rockefeller/Red; TISSUE=Salivary gland;
RX
     MEDLINE=20099025; PubMed=10620041;
     Beerntsen B.T., Champagne D.E., Coleman J.L., Campos Y.A., James A.A.;
RA
RT
     "Characterization of the Sialokinin I gene encoding the salivary
RT
     vasodilator of the yellow fever mosquito, Aedes aegypti.";
     Insect Mol. Biol. 8:459-467(1999).
RL
     EMBL; AF108100; AAD16884.1; -.
DR
     GO; GO:0007268; P:synaptic transmission; IEA.
DR
     GO; GO:0007217; P:tachykinin signaling pathway; IEA.
DR
     InterPro; IPR002040; Tachy_Neurokinin.
DR
     PROSITE; PS00267; TACHYKININ; 1.
DR
FT
     NON TER
                  1
                          1
SQ
     SEQUENCE
                11 AA; 1203 MW; 8BADC77C6B59C33A CRC64;
  Query Match
                          90.9%; Score 20; DB 5; Length 11;
  Best Local Similarity 80.0%; Pred. No. 96;
          4; Conservative 0; Mismatches
  Matches
                                                1; Indels 0; Gaps
QУ
            1 FXGLM 5
              1 111
Db
            6 FYGLM 10
```

Search completed: April 7, 2004, 09:26:16 Job time : 63 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:15:16; Search time 11 Seconds

(without alignments)

23.668 Million cell updates/sec

Title: US-10-030-388A-1

Perfect score: 22

Sequence: 1 FXGLM 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 801

Minimum DB seq length: 0 Maximum DB seq length: 15

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database : SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	21 20 20 20 20 20 20 20 20 20 20 20 20 20	95.5 90.9 90.9 90.9 90.9 90.9 90.9 90.9	13 10 10 10 10 10 10 10 10 10 11 11 11		CP1_APLCA TKN1_SCYCA TKNB_CHICK TKNB_ONCMY TKNB_RANCA TKNB_RANRI TKNC_RANCA TKNK_PIG TKN_PHYBI TKS1_AEDAE TKS2_AEDAE TKN1_PSEGU TKN1_UPEIN TKN1_UPERU TKN1_UPERU TKN1_UPERU	Q10998 aplysia cal P08608 scyliorhinu P19851 gallus gall P28500 oncorhynchu P22689 rana catesb P29135 rana ridibu P22690 rana catesb P01292 sus scrofa P08610 phyllomedus P42634 aedes aegyp P42635 aedes aegyp P42986 pseudophryn P82026 uperoleia i P08612 uperoleia r P42987 pseudophryn
17	20	90.9	11	1	TKN2_UPERU TKN3_PSEGU	P08616 uperoleia r P42988 pseudophryn

18	20	90.9	11	1	TKN4 PSEGU	P42989	pseudophryn
19	20	90.9	11	1	TKN5 PSEGU	P42990	pseudophryn
20	20	90.9	11	1	TKNA CHICK	P19850	gallus gall
21	20	90.9	11	1	TKNA GADMO	P28498	gadus morhu
22	20	90.9	11	1	TKNA HORSE	P01290	equus cabal
23	20	90.9	11	1	TKNA ONCMY	P28499	oncorhynchu
24	20	90.9	11	1	TKNA RANCA	P22688	rana catesb
25	20	90.9	11	1	TKNA RANRI	P29207	rana ridibu
26	20	90.9	11	1	TKNA SCYCA		scyliorhinu
27	20	90.9	11	1	TKN ELEMO	P01293	eledone mos
28	20	90.9	11	1	TKN PHYFU		physalaemus
29	20	90.9	12	1	TKN1 KASMA	P08613	kassina mac
30	20	90.9	12	1	TKN KASSE		kassina sen
31	20	90.9	14	1	TKNM RANMA		rana margar
32	18	81.8	12	1	TKN2 KASMA	D09614	kassina mac
33	14	63.6	15	1	ATP2 PINPS		
34	13	59.1	9	1	TRP4 LEUMA	r01003]	pinus pinas
35	13	59.1	10	1	TRP6 LEUMA	P01/30 .	leucophaea
36	13	59.1	10	1	TRP7 LEUMA	P01730	leucophaea
37	13	59.1	10	1	TRP8 LEUMA	P81/39 .	leucophaea
38	13	59.1	10	1	TRP9 LEUMA		leucophaea
39	13	59.1	12	1	PA2B VIPBO	P81/41 .	leucophaea
40	13	59.1	15	1		P31859 1	vipera beru
41	12	54.5	9	1	R13A_SPIOL	P82454 s	spinacia ol
42	12	54.5	9		CCAP_CARMA		carcinus ma
43	12	54.5		1	FIBB_MACFU		macaca fusc
44	12		9	1	RE42_LITRU		litoria rub
45	12	54.5	9	1	TKC1_CALVO	P41517 d	calliphora
46		54.5	9	1	TKL1_LOCMI	P16223]	locusta mig
	12	54.5	10	1	CAER_LITXA		litoria xan
47	12	54.5	10	1	CU30_LOCMI	P11735]	locusta mig
48	12	54.5	10	1	TKL2_LOCMI	P16224]	Locusta mig
49	12	54.5	10	1	TKL3_LOCMI	P30249]	Locusta mig
50	12	54.5	10	1	TKL4_LOCMI	P30250]	Locusta mig
51	12	54.5	10	1	TRP5_LEUMA	P81737 1	Leucophaea
52	12	54.5	11	1	RE41_LITRU	P82074 l	itoria rub
53	12	54.5	11	1	TKC2_CALVO	P41518 c	calliphora
54	12	54.5	12	1	CD11_LITXA	P56245 1	itoria xan
55	12	54.5	12	1	CD14_LITXA		itoria xan
56	12	54.5	12	1	${\tt FRE1_LITIN}$		itoria inf
57	12	54.5	13	1	CD71_LITEW		itoria ewi
58	12	54.5	13	1	CHEP_PARID		arapolybia
59	12	54.5	13	1	CRBL_ICASP		caria sp.
60	12	54.5	13	1	CRBL_VESAN		espa anali
61	12	54.5	13	1	CRBL VESLE		espula lew
62	12	54.5	13	1	CRBL VESMA		espa manda
63	12	54.5	13	1	CRBL VESTR		espa tropi
64	12	54.5	13	1	CRBL VESXA		espa xanth
65	12	54.5	13	1	HPB9 RANES		ana escule
66	12	54.5	13	1	TEMC RANTE		ana tempor
67	12	54.5	14	1	CRBL VESOR		espa orien
68	12	54.5	15	1	CDN2 LITGI		itoria gil
69	12	54.5	15	1	CDN4 LITCE		itoria gii itoria cae
70	12	54.5	15	1	CDN5 LITCE		itoria cae itoria cae
71	12	54.5	15	1	CDN6 LITCE		
72	12	54.5	15	1	FRE2 LITIN		itoria cae
73	12	54.5	15	1	LEC1 PSOSC		itoria inf
74	12	54.5	15	1	URE1 MORMO		sophocarpu
		-		-	11.014.10	F1/33/ mo	organella

```
RESULT 1
CP1 APLCA
ΙD
     CP1 APLCA
                    STANDARD;
                                   PRT; 13 AA.
     Q10998;
АC
DT
     01-OCT-1996 (Rel. 34, Created)
     01-OCT-1996 (Rel. 34, Last sequence update)
DT
DT
     01-OCT-1996 (Rel. 34, Last annotation update)
DE
     Cerebral peptide 1 (CP1).
     Aplysia californica (California sea hare).
OS
     Eukaryota; Metazoa; Mollusca; Gastropoda; Orthogastropoda;
OC
     Apogastropoda; Heterobranchia; Euthyneura; Opisthobranchia; Anaspidea;
OC
     Aplysioidea; Aplysiidae; Aplysia.
OC
OX
     NCBI TaxID=6500;
RN
     [1]
RP
     SEQUENCE.
RC
     TISSUE=Ganglion;
RX
     MEDLINE=97001771; PubMed=8844763;
RA
     Phares G.A., Lloyd P.E.;
     "Purification, primary structure, and neuronal localization of
RT
RT
     cerebral peptide 1 from Aplysia.";
RL
     Peptides 17:753-761(1996).
     -!- FUNCTION: May function as a peptide transmitter.
CC
     -!- TISSUE SPECIFICITY: Found predominantly in the cerebral and pedal
CC
CC
         ganglia.
     SEQUENCE 13 AA; 1314 MW; 9DBC3CE82C667B05 CRC64;
SQ
  Query Match
                          95.5%; Score 21; DB 1; Length 13;
 Best Local Similarity 80.0%; Pred. No. 8.8;
 Matches
          4; Conservative 0; Mismatches
                                                 1; Indels 0; Gaps
                                                                            0;
           1 FXGLM 5
Qу
             1 111
Db
           1 FSGLM 5
```

Search completed: April 7, 2004, 09:25:09 Job time: 20 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:23:37; Search time 21 Seconds

(without alignments)

22.903 Million cell updates/sec

Title: US-10-030-388A-1

Perfect score: 22

Sequence: 1 FXGLM 5

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 2522

Minimum DB seq length: 0
Maximum DB seq length: 15

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 1000 summaries

Database: PIR 78:*

1: pir1:* 2: pir2:*

3: pir3:*

4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1 2 3 4 5 6 7 8 9 10 11 12 13	20 20 20 20 20 20 20 20 20 20 20 20	90.9 90.9 90.9 90.9 90.9 90.9 90.9 90.9	10 10 10 10 10 10 10 10 10 10	1 2 2 2 2 2 2 2 2 2 2 2 1	SPPGNK JN0024 A49581 B49581 A24867 S23307 S23186 S07202 B61033 C61033 S27178 SPHO	neuromedin K - pig neurokinin A - chi sialokinin I - yel sialokinin II - ye scyliorhinin I - s neurokinin A - rai neurokinin A - Atl phyllomedulin - tw ranatachykinin B - ranatachykinin C - neurokinin A-relat substance P - hors eledoisin - curled

14	20	90.9	11	1	A60654	substance P - guin
15	20	90.9	11	1	EOOC	eledoisin - musky
16	20	90.9	11	2	JN0023	substance P - chic
17	20	90.9	11	2	D60409	kassinin-like pept
18	20	90.9	11	2	F60409	substance P-like p
19	20	90.9	11	2	E60409	substance P-like p
20	20	90.9	11	2	S23308	substance P - rain
21	20	90.9	11	2	S23306	substance P - Atla
22	20	90.9	11	2	B60409	kassinin-like pept
23	20	90.9	11	2	C60409	kassinin-like pept
24	20	90.9	11	2	S07203	uperolein - frog (
25	20	90.9	11	2	S07201	physalaemin - frog
26	20	90.9	11	2	A61033	ranatachykinin A -
27	20	90.9	11	2	S33300	probable substance
28	20	90.9	12	2	S10059	tachykinin - Afric
29	20	90.9	12	2	S07206	kassinin - Senegal
30	18	81.8	12	2	S07436	tachykinin - Afric
31	15	68.2	10	2	S19296	
32	15	68.2	14	2	PA0096	16K protein - poul
33	15	68.2	15	2	H56978	pyruvate decarboxy
34	14	63.6	11	2	PT0249	collagen alpha 1(X
35	14	63.6	12	2	B46662	Ig heavy chain CRD
36	14	63.6	15	2	S36893	collagen alpha 2(V
37	13	59.1	5	2	A61445	ribosomal protein
38	13	59.1	7	2	A60224	Met-enkephalin - b
39	13	59.1	9	2	PT0225	Met-enkephalin-Arg
40	13	59.1	9	2		Ig heavy chain CDR
41	13	59.1	13	2	PD0027	pev-tachykinin - p
42	13	59.1	15	2	A32734	enkephalin precurs
43	12	54.5		2	A28497	neurotensin-relate
44	12	54.5	8 9	2	S13661	polygalacturonase
45	12	54.5	9	2	A61357	phyllocaerulein -
46	12	54.5	9	2	C24180	fibrinogen beta ch
47	12	54.5	9		A26363	cardioactive pepti
48	12	54.5	9	2 2	S39766	cardioactive pepti
49	12	54.5		2	S27233	cardioactive pepti
50	12	54.5	9		S10784	enamelin i - bovin
51	12		9	2	PH0942	T-cell receptor be
52		54.5	9	2	S39767	cardioactive pepti
53	12	54.5	10	1	ECLQ1M	tachykinin I - mig
54	12	54.5	10	1	ECLQ3M	tachykinin III - m
55	12	54.5	10	1	ECLQ4M	tachykinin IV - mi
56	12	54.5	10	2	A61337	caerulein - frog (
	12	54.5	10	2	S68033	cytochrome P450 1A
57	12	54.5	10	2	A59173	nuclease Bh1 (EC 3
58	12	54.5	11	1	ECLQ2M	tachykinin II - mi
59	12	54.5	11	2	A35594	buccalin - Califor
60	12	54.5	12	2	\$26558	T-cell receptor be
61	12	54.5	12	2	PS0213	28K protein 4412 -
62	12	54.5	12	2	S74144	aggrecan - bovine
63	12	54.5	12	2	PH1635	Ig H chain V-D-J r
64	12	54.5	12	2	S39762	cytochrome P450 UT
65	12	54.5	12	2	S23168	Z protein - guinea
66 55	12	54.5	13	2	S36874	cytochrome P450 CM
67	12	54.5	13	2	S09019	hemolytic protein
68	12	54.5	13	2	B56864	dipeptidyl-peptida
69	12	54.5	14	2	JN0390	histamine-releasin
70	12	54.5	14	2	S50900	chlorophyll a/b-bi
						• <u>•</u> • -

```
RESULT 1
 SPPGNK
 neuromedin K - pig
 C; Species: Sus scrofa domestica (domestic pig)
 C;Date: 19-Feb-1984 #sequence revision 19-Feb-1984 #text_change 23-Aug-1996
 C; Accession: A01560
 R; Kangawa, K.; Minamino, N.; Fukuda, A.; Matsuo, H.
 Biochem. Biophys. Res. Commun. 114, 533-540, 1983
 A; Title: Neuromedin K: a novel mammalian tachykinin identified in porcine spinal
 cord.
 A; Reference number: A01560; MUID: 83282812; PMID: 6576785
 A; Accession: A01560
A; Molecule type: protein
A; Residues: 1-10 <KAN>
A; Note: the structure of the peptide was confirmed by synthesis
C; Comment: The biological source of this peptide is spinal cord. It stimulates
smooth muscle contraction in mammalian assay systems, in a manner similar to
that of substance P.
C; Superfamily: neurokinin B precursor
C; Keywords: amidated carboxyl end; hormone; spinal cord
F;10/Modified site: amidated carboxyl end (Met) #status experimental
  Query Match
                           90.9%; Score 20; DB 1; Length 10;
  Best Local Similarity
                          80.0%; Pred. No. 25;
            4; Conservative 0; Mismatches
                                                 l; Indels
                                                                  0; Gaps
                                                                              0;
            1 FXGLM 5
Qу
              \perp
Db
            6 FVGLM 10
RESULT 2
JN0024
neurokinin A - chicken
C; Species: Gallus gallus (chicken)
C;Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 18-Aug-2000
C; Accession: JN0024
R; Conlon, J.M.; Katsoulis, S.; Schmidt, W.E.; Thim, L.
Regul. Pept. 20, 171-180, 1988
A; Title: [Arg3] substance P and neurokinin A from chicken small intestine.
A; Reference number: JN0023; MUID: 88204263; PMID: 2452461
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Db

Search completed: April 7, 2004, 09:27:06 Job time: 26 secs

OM protein - protein search, using sw model

Run on: April 7, 2004, 09:26:22; Search time 40 Seconds

(without alignments)

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Title: US-10-030-388A-1

Perfect score: 22

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Scoring table: BLOSUM62

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Searched: 1071772 seqs, 262633353 residues

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Maximum Match 100%

Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Result Query

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; APPLICANT: Arad, Gila
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  CURRENT FILING DATE: 2002-06-13
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agents and
; TITLE OF INVENTION: methods for treatment of abnormal physiological states
; FILE REFERENCE: 2892-106
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Run on: April 7, 2004, 09:22:07; Search time 22 Seconds

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Listing first 1000 summaries

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; Patent No. 5304632
  GENERAL INFORMATION:
    APPLICANT: Vaudry, Hubert
     APPLICANT: Conlon, Michael J.
     TITLE OF INVENTION: Neuropeptides of the Tachykinin Family
    NUMBER OF SEQUENCES: 3
    CORRESPONDENCE ADDRESS:
      ADDRESSEE: Zarley, McKee, Thomte, Voorhees, and Sease
      STREET: 801 Grand, Suite 3200
      CITY: Des Moines
     STATE: Iowa
     COUNTRY: United States
      ZIP: 50309
   COMPUTER READABLE FORM:
      MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
      OPERATING SYSTEM: PC-DOS/MS-DOS
      SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
      APPLICATION NUMBER: US/07/753,909B
      FILING DATE: 19910903
      CLASSIFICATION: 530
   PRIOR APPLICATION DATA:
     APPLICATION NUMBER: FR 9106759
      FILING DATE: 04-JUN-1991
    ATTORNEY/AGENT INFORMATION:
      NAME: Sease, Edmund J.
      REGISTRATION NUMBER: 24,741
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: (515)-288-3667
      TELEFAX: (515)-288-1338
  INFORMATION FOR SEQ ID NO: 3:
    SEQUENCE CHARACTERISTICS:
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      TYPE: AMINO ACID
      STRANDEDNESS: single
     TOPOLOGY: linear
   MOLECULE TYPE: peptide
   FRAGMENT TYPE: C-terminal
    ORIGINAL SOURCE:
      ORGANISM: Rana ridibunda
      DEVELOPMENTAL STAGE: adult
      TISSUE TYPE: brain
US-07-753-909B-3
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 Query Match
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; Sequence 2, Application US/07934553
; Patent No. 5314690
; GENERAL INFORMATION:
    APPLICANT: PATTERSON, ROY
    APPLICANT: HARRIS, KATHLEEN E
    TITLE OF INVENTION: METHOD AND COMPOSITION FOR REDUCING IGE
    TITLE OF INVENTION: ANTIBODIES TO SPECIFIC ALLERGENS
    NUMBER OF SEQUENCES: 5
    CORRESPONDENCE ADDRESS:
     ADDRESSEE: TILTON, FALLON, LUNGMUS & CHESTNUT
     STREET: 100 SOUTH WACKER DRIVE
     CITY: CHICAGO
     STATE: ILLINOIS
;
      COUNTRY: USA
;
      ZIP: 60606-4002
;
   COMPUTER READABLE FORM:
     MEDIUM TYPE: Floppy disk
      COMPUTER: IBM PC compatible
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     SOFTWARE: PatentIn Release #1.0, Version #1.25
    CURRENT APPLICATION DATA:
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     FILING DATE: 19920821
     CLASSIFICATION: 424
   PRIOR APPLICATION DATA:
      APPLICATION NUMBER: US 07/705,071
      FILING DATE: 24-MAY-1991
    ATTORNEY/AGENT INFORMATION:
     NAME: FENTRESS, SUSAN B
      REGISTRATION NUMBER: 31,327
      REFERENCE/DOCKET NUMBER: NU-9033CIP
    TELECOMMUNICATION INFORMATION:
      TELEPHONE: 312/456-8000
  INFORMATION FOR SEQ ID NO: 2:
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;
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Listing first 1000 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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125	20	90.9	10	4	AAG99347	Aag99347 Atypical
126	20	90.9	10	4	AAG64746	Aag64746 Substance
127	20	90.9	10	4	AAB82381	Aab82381 Human neu
128	20	90.9	10	5	AAE27017	Aae27017 Human gen
129	20	90.9	10	5	AAE27155	Aae27155 Human gen
130	20	90.9	10	5	ABB99004	Abb99004 Neurokini
131	20	90.9	10	5	ABB99003	Abb99003 Neurokini
132	20	90.9	10	6	ABG76074	Abg76074 Sea lampr
133	20	90.9	10	6	ABU65028	Abu65028 Human sec
134	20	90.9	10	7	ADC63999	Adc63999 Mosquito
135	20	90.9	10	7	ADC63998	Adc63998 Mosquito
136	20	90.9	11	1	AAP50425	Aap50425 Hypotensi
137	20	90.9	11	1	AAP61480	Aap61480 Sequence
138	20	90.9	11	1	AAP80312	Aap80312 Sequence
139	20	90.9	11	2	AAR11854	Aar11854 Undecapep
140	20	90.9	11	2	AAR13162	Aar13162 Sialic ac
$140 \\ 141$	20	90.9	11	2	AAR28445	Aar28445 Neurokini
	20	90.9	11	2	AAR28442	Aar28442 Substance
142	20	90.9	11	2	AAR21971	Aar21971 Cyclic su
143	20	90.9	11	2	AAR21942	Aar21942 Substance
144 145	20	90.9	11	2	AAR21962	Aar21962 Substance
	20	90.9	11	2	AAR21945	Aar21945 Substance
146		90.9	11	2	AAR21943	Aar21963 Substance
147	20	90.9	11	2	AAR21909 AAR21949	Aar21949 Substance
148	20	90.9	11	2	AAR21943 AAR21951	Aar21951 Substance
149	20	90.9	11	2	AAR21931 AAR21946	Aar21946 Substance
150	20	90.9	11	2	AAR21940 AAR21964	Aar21964 Substance
151	20		11	2	AAR21904 AAR21972	Aar21972 Cyclic su
152	20	90.9	11	2	AAR21972 AAR21970	Aar21970 Cyclic su
153	20	90.9		2	AAR21970 AAR21938	Aar21938 Substance
154	20	90.9	11	2	AAR21930 AAR21941	Aar21941 Substance
155	20	90.9	11 11	2	AAR21941 AAR21939	Aar21939 Substance
156	20	90.9	11	2	AAR21959 AAR21954	Aar21954 Substance
157	20	90.9		2	AAR42646	Aar42646 Neurokini
158	20	90.9	11 11	2	AAR42649	Aar42649 Neurokini
159	20	90.9	11	2	AAR32183	Aar32183 Ranakinin
160	20	90.9	$\frac{11}{11}$	2	AAR32183 AAR32182	Aar32182 Generic n
161	20	90.9				Aar85243 Substance
162	20	90.9	11			Aar77109 Uperoleia
163	20	90.9	11	2	AAR77109	Aar77310 Substance
164	20	90.9	11	2	AAR77310	Aaw33181 Mono-DTPA
165	20	90.9	11	2	AAW33181	Aaw33180 Mono-DTPA
166	20	90.9	11	2	AAW33180	Aaw04616 Substance
167	20	90.9	11	2	AAW04616	Aaw04613 Physalaem
168	20	90.9	11	2	AAW04613	Aaw04013 Fnysalaem Aaw79775 Substance
169	20	90.9	11	2	AAW79775	Aaw42973 Substrate
170	20	90.9	11	2	AAW42973	Aaw48950 Tachykini
171	20	90.9	11	2	AAW48950	Aaw48280 Tyrosylpe
172	20	90.9	11	2	AAW48280	Aaw40200 Ty105y1pe Aaw79663 Substance
173	20	90.9	11	2	AAW79663	
174	20	90.9	11	2	AAW79662	Aaw79662 Substance
175	20	90.9	11	2	AAW92679	Aaw92679 Human tac
176	20	90.9	11	2	AAW92676	Aaw92676 Human tac
177	20	90.9	11	2	AAW92720	Aaw92720 Human tac
178	20	90.9	11	2	AAW92673	Aaw92673 Human tac
179	20	90.9	11	2	AAW92708	Aaw92708 Human tac
180	20	90.9	11	2	AAW92731	Aaw92731 Human tac

181	20	90.9	11	2	AAW92670	Aaw92670 Human tac
182	20	90.9	11	2	AAW92689	Aaw92689 Human tac
183	20	90.9	11	2	AAW92715	Aaw92715 Human tac
184	20	90.9	11	2	AAW92719	Aaw92719 Human tac
185	20	90.9	11	2	AAW92727	Aaw92727 Human tac
186	20	90.9	11	2	AAW92680	Aaw92680 Human tac
187	20	90.9	11	2	AAW92692	Aaw92692 Human tac
188	20	90.9	11	2	AAW92681	Aaw92681 Human tac
189	20	90.9	11	2	AAW92669	Aaw92669 Human tac
190	20	90.9	11	2	AAW92691	Aaw92691 Human tac
191	20	90.9	11	2	AAW92672	Aaw92672 Human tac
192	20	90.9	11	2	AAW92690	Aaw92690 Human tac
193	20	90.9	11	2	AAY30985	Aay30985 Non-cross
193	20	90.9	11	2	AAY03156	Aay03156 Substance
194	20	90.9	11	3	AAB23027	Aab23027 Human/rat
		90.9	11	3	AAB18483	Aab18483 Peptide s
196	20	90.9	11	3	AAY67965	Aay67965 Carboxyfl
197	20	90.9	11	3	AAY32382	Aay32382 Cell diff
198	20		11	3	AAB06260	Aab06260 Substance
199	20	90.9		3	AAB08200	Aab08614 Peptide i
200	20	90.9	11		AAB50311	Aab50311 Previn pe
201	20	90.9	11	4		Aab50312 Previn pe
202	20	90.9	11	4	AAB50312 AAB50306	Aab50312 Filevin pe Aab50306 Substance
203	20	90.9	11	4		Aab50316 Previn pe
204	20	90.9	11	4	AAB50316	Aab50510 FicVin pe Aab50544 Prolyl en
205	20	90.9	11	4	AAB50544	Aabbusta Flory en Aabbusta Tachykini
206	20	90.9	11	4	AAB91371	-
207	20	90.9	11	4	AAB91357	-
208	20	90.9	11	4	AAB91409	_
209	20	90.9	11	4	AAB91450	Aab91450 Tachykini
210	20	90.9	11	4	AAB91438	Aab91438 Tachykini
211	20	90.9	11	4	AAB91449	Aab91449 Tachykini
212	20	90.9	11	4	AAB91437	Aab91437 Tachykini
213	20	90.9	11	4	AAB91351	Aab91351 Tachykini
214	20	90.9	11	4	AAB91386	Aab91386 Tachykini
215	20	90.9	11	4	AAB91402	Aab91402 Tachykini
216	20	90.9	11	4	AAB91436	Aab91436 Tachykini
217	20	90.9	11	4	AAG99358	Aag99358 ATT-short
218	20	90.9	11	4	AAG99354	Aag99354 Substance
219	20	90.9	11	4	AAG99337	Aag99337 Human aty
220	20	90.9	11	4	AAU07298	Aau07298 Substance
221	20	90.9	11	4	AAG62768	Aag62768 Amino aci
222	20	90.9	11	4	AAB84527	Aab84527 Amino aci
223	20	90.9	11	4	AAB49755	Aab49755 Complex s
224	20	90.9	11	4	AAB98866	Aab98866 Chimeric
225	20	90.9	11	4	AAB82070	Aab82070 Substance
226	20	90.9	11	5	ABB75676	Abb75676 Pseudo-me
227	20	90.9	11	5	AA017685	Aaol7685 Equine gu
228	20	90.9	11	5	AAU85994	Aau85994 Modified
229	20	90.9	11	5	ABB09496	Abb09496 Substance
230	20	90.9	11	5	ABB09481	Abb09481 Substance
231	20	90.9	11	5	AAU96752	Aau96752 Substance
	20	90.9	11	5	AAU77844	Aau77844 Tachykini
232	20	90.9	11	5	AAE19492	Aae19492 Substance
233		90.9	11	5	AAU91346	Aau91346 Substance
234	20		11	5	AAU10409	Aau10409 Subtance-
235	20	90.9		5	AA010409 AA015554	Aao15554 Human Sub
236	20	90.9	11	5	ABB99002	Abb99002 Substance
237	20	90.9	11	J	ADDJJUUZ	1DD 55002 Babbbanee

238	20	90.9	11	5	ABB09842	Abb09842 Amino aci
239	20	90.9	11	6	ABP72531	Abp72531 Substance
240	20	90.9	11	6	ABG76071	Abg76071 Chicken a
241	20	90.9	11	6	ABG76064	Abg76064 Human tac
242	20	90.9	11	6	ABG76073	Abg76073 Rainbow t
243	20	90.9	11	6	ABG76069	Abg76069 Spotted d
244	20	90.9	11	6	ABG76070	Abg76070 Guinea pi
245	20	90.9	11	6	ABG76072	Abg76072 Atlantic
246	20	90.9	11	7	ADD69983	Add69983 Primate n
247	20	90.9	11	7	ABR83030	Abr83030 Substance
248	20	90.9	12	2	AAR32798	Aar32798 Tyr-1 sub
249	20	90.9	12	2	AAR85244	Aar85244 Substance
250	20	90.9	12	2	AAW04615	Aaw04615 Kassinin
251	20	90.9	12	2	AAW94412	Aaw94412 Cancer pr
252	20	90.9	12	2	AAW92730	Aaw92730 Human tac
253	20	90.9	12	2	AAY03157	Aay03157 Substance
254	20	90.9	12	4	AAB92032	Aab92032 Galanin p
255	20	90.9	12	4	AAB70553	Aab70553 Octopus t
256	20	90.9	12	4	AAB70557	Aab70557 Octopus t
257	20	90.9	12	4	AAB70554	Aab70554 Octopus t
258	20	90.9	12	4	AAG62772	Aag62772 Amino aci
259	20	90.9	12	4	AAG62775	Aag62775 Amino aci
260	20	90.9	12	4	AAG62769	Aag62769 Amino aci
261	20	90.9	12	4	AAB84528	Aab84528 Amino aci
262	20	90.9	12	4	AAB98873	Aab98873 Chimeric
263	20	90.9	12	4	AAB98870	Aab98870 Chimeric
264	20	90.9	12	4	AAB98867	Aab98867 Chimeric
265	20	90.9	12	5	ABB09480	Abb09480 Substance
266	20	90.9	12	5	AAU96753	Aau96753 Substance
267	20	90.9	12	5	AAU96756	Aau96756 Substance
268	20	90.9	12	5	ABB04922	Abb04922 Memory-en
269	20	90.9	12	5	AAE19496	Aae19496 Substance
270	20	90.9	12	5	AAE19499	Aae19499 Substance
271	20	90.9	12	5	AAE19493	Aae19493 Substance
272	20	90.9	12	7	ABR84705	Abr84705 Aggrecana
273	20	90.9	13	2	AAR29593	Aar29593 Vertebrat
274	20	90.9	13	2	AAW92700	Aaw92700 Human tac
275	20	90.9	13	2	AAY03158	Aay03158 Substance
276	20	90.9	13	4	AAG62773	Aag62773 Amino aci
277	20	90.9	13	4	AAG62770	Aag62770 Amino aci
278	20	90.9	13	4	AAG62776	Aag62776 Amino aci
279	20	90.9	13	4	AAB98874	Aab98874 Chimeric
280	20	90.9	13	4	AAB98871	Aab98871 Chimeric
281	20	90.9	13	4	AAB98868	Aab98868 Chimeric
282	20	90.9	13	5	AAU96757	Aau96757 Substance
283	20	90.9	13	5	AAU96754	Aau96754 Substance
284	20	90.9	13	5	AAE19494	Aae19494 Substance
285	20	90.9	13	5	AAE19497	Aae19497 Substance
286	20	90.9	13	5	AAE19500	Aae19500 Substance
287	20	90.9	14	2	AAY03159	Aay03159 Substance
288	20	90.9	14	4	AAB91440	Aab91440 Tachykini
289	20	90.9	14	4	AAG62771	Aag62771 Amino aci
290	20	90.9	14	4	AAG62777	Aag62777 Amino aci
291	20	90.9	14	4	AAG62774	Aag62774 Amino aci
292	20	90.9	14	4	AAB98872	Aab98872 Chimeric
293	20	90.9	14	4	AAB98869	Aab98869 Chimeric
294	20	90.9	14	4	AAB98875	Aab98875 Chimeric

205	20	90.9	14	5	AAU96755	Aau96755	Substance
295	20	90.9	14	5	AAU96758	Aau96758	Substance
296			14	5	AAE19498		Substance
297	20	90.9		5	AAE19495		Substance
298	20	90.9	14		AAE19493		Substance
299	20	90.9	14	5			Targeting
300	20	90.9	14	6	ABP56241		Radiophar
301	20	90.9	14	8	ADE64332		
302	20	90.9	15	2	AAW75250	Aaw75250	
303	20	90.9	15	5	AAE27016		Human gen
304	20	90.9	15	5	AAE27154		Human gen
305	20	90.9	15	6	ABU65027		Human sec
306	19	86.4	10	2	AAW92698		Human tac
307	19	86.4	10	2	AAW92696		Human tac
308	19	86.4	10	4	AAB91370		Tachykini
309	19	86.4	11	2	AAR21968	Aar21968	Cyclic su
310	19	86.4	11	2	AAW92687	Aaw92687	Human tac
311	19	86.4	11	4	AAB50314	Aab50314	Previn pe
	19	86.4	11	4	AAB50315	Aab50315	Previn pe
312		86.4	11	4	AAB50313	Aab50313	Previn pe
313	19		$\frac{11}{14}$	2	AAW47171		Antigenic
314	19	86.4		3			MAb 12f3.
315	19	86.4	14		AAB01939		XMEL anti
316	19	86.4	14	4	AAE12476		Melag 7 a
317	19	86.4	14	5	AAE26378		Anti-mrk-
318	19	86.4	14	6	ABG72920		
319	18	81.8	9	2	AAW45712		MAGE-3 19
320	18	81.8	10	7	ADD94752		Human SIM
321	18	81.8	10	7	ADD94536		Human SIM
322	18	81.8	10	7	ADD94736		Human SIM
323	18	81.8	10	7	ADD94724		Human SIM
324	18	81.8	10	7	ADD94684		Human SIM
325	18	81.8	10	7	ADD94543		Human SIM
326	18	81.8	12	1	AAP50357		Hylambati
327	18	81.8	12	2	AAW79348	Aaw79348	Staphyloc
328	18	81.8	15	4	AAB67932	Aab67932	Internal
329	17	77.3	5	2	AAW92702	Aaw92702	Human tac
	17	77.3	5	4	AAG99352	Aaq99352	Atypical
330		77.3	5	4	AAG99346		Atypical
331	17		5	5	AAG80461		Enzyme cl
332	17	77.3			ABB10089		Substance
333	17	77.3	5	5	AAW29545		Suc(psi(C
334	17	77.3	6	2	AAW29343 AAY22121		Human uri
335	17	77.3	6	2			Fluorinat
336	17	77.3	6	4	AAB82442		Fluorinat
337	17	77.3	6	4	AAB82421		
338	17	77.3	6	4	AAB82449		Fluorinat
339	17	77.3	6	4	AAB82420		Fluorinat
340	17	77.3	6	4	AAB82450		Fluorinat
341	17	77.3	7	2	AAW29544		Asp-Ser(p
342	17	77.3	7	2	AAW29543		B Asp-Ser-P
343	17	77.3	7	2	AAW29547		Asp-Ser-P
344	17	77.3	7	2	AAW29540		Asp-Ser-P
345	17	77.3	7	4	AAB82418	Aab82418	Fluorinat
346	17	77.3	7	4	AAB82437	Aab82437	/ Fluorinat
347	17	77.3	7	4	AAB82445	Aab82445	Fluorinat
	17	77.3	7	4	AAB82446	Aab82446	Fluorinat
348	17	77.3	7	4	AAB82424		l Fluorinat
349		77.3	7	4	AAB82419		Fluorinat
350	17 17		7	4	AAB82425		Fluorinat
351	17	77.3	,	7	1202420	- 1 72 120	

```
RESULT 1
AAW64648
     AAW64648 standard; peptide; 12 AA.
ΙD
XX
     AAW64648;
АC
XX
     23-OCT-1998 (first entry)
DT
XX
     Synthetic SEB-related peptide (position 13-24).
DE
XX
     Enterotoxin B; SEB; pyrogenic exotoxin; PET; protective immunity;
ΚW
     toxic shock; toxin-mediated activation; T-cell; antagonist; inhibitor;
KW
     therapeutic; vaccine; food poisoning.
KW
XX
     Synthetic.
OS
     Staphylococcus aureus.
OS
XX
     WO9829444-A1.
PN
XX
     09-JUL-1998.
PD
XX
                    97WO-IL000438.
     30-DEC-1997;
PF
XX
                    96IL-00119938.
     30-DEC-1996;
PR
XX
     (YISS ) YISSUM RES & DEV CO.
PA
XX
     Kaempfer R, Arad G;
PΙ
XX
     WPI; 1998-388042/33.
DR
XX
     New peptide(s) derived from pyrogenic exotoxin - useful for, e.g.
PT
     antagonising toxin-mediated activation of T cells and prevention or
PT
     treatment of toxic shock caused by exotoxin(s).
PT
XX
     Example 2; Page 38; 68pp; English.
PS
XX
     AAW64636-W64657 are peptides homologous to the amino acid sequence of a
CC
     fragment of a pyrogenic exotoxin (PET), and derivatives of the peptide
CC
     capable of eliciting protective immunity against toxic shock induced by
CC
     PET or by a mixture of PETs. Such peptides are also capable of
CC
     antagonising toxin-mediated activation of T-cells, inhibiting expression
CC
     of pyrogenic toxin (PT)-induced mRNA encoded by IL-2, IFN-gamma or TNF-
CC
     beta genes. The peptides may be used to prepare therapeutics or vaccines
CC
      for the treatment of prophylaxis of toxin-mediated activation of T cells
 CC
     and eliciting protective immunity against toxic shock induced by PETs.
 CC
     They can also be used for the treatment of harmful effects (especially
 CC
      food poisoning) and toxic shock caused by PET. Antiserum to the peptides
 CC
      can also be used for alleviating toxic shock induced by PET
 CC
 XX
      Sequence 12 AA;
 SO
                          95.5%; Score 21; DB 2; Length 12;
```

Query Match

```
Best Local Similarity 80.0%; Pred. No. 82;
          4; Conservative 0; Mismatches 1; Indels 0; Gaps
                                                                             0;
 Matches
           1 FXGLM 5
QУ
             +
           5 FTGLM 9
Db
RESULT 2
AAM97765
     AAM97765 standard; peptide; 14 AA.
XX
     AAM97765;
AC
XX
     24-JAN-2002 (first entry)
DT
XX
     Human peptide #1040 encoded by a SNP oligonucleotide.
DE
XX
     Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW
     neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
ΚW
     amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW
     cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW
     complement related protein; cytochrome; kinesin; cytokine; interferon;
KW
     interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW
     multifactorial disease; autoimmune disease; infection;
KW
     nervous system disease.
KW
XX
     Homo sapiens.
OS
XX
     WO200147944-A2.
ΡN
XX
     05-JUL-2001.
PD
XX
     28-DEC-2000; 2000WO-US035498.
ΡF
XX
     28-DEC-1999;
                    99US-0173419P.
PR
     27-DEC-2000; 2000US-00173419.
PR
XX
      (CURA-) CURAGEN CORP.
PA
XX
     Shimkets RA, Leach M;
PΙ
XX
     WPI; 2001-465210/50.
DR
XX
      Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
 PT
      oncogenes and histones, useful for diagnosing and treating, e.g. cancer,
 PT
      autoimmune diseases and infections.
 PT
 XX
      Disclosure; Page 3895; 4143pp; English.
 PS
 XX
      The present invention relates to oligonucleotides (see AAL26793-AAL34659)
 CC
      encoding polymorphic variants of proteins related to amylases, amyloid
 CC
      proteins, angiopoietin, apoptosis related proteins, cadherin, cyclin,
 CC
      polymerase, oncogenes, histones, kinases, colony stimulating factors,
 CC
      complement related proteins, cytochromes, kinesins, cytokines,
 CC
      interferons, interleukins, G-protein coupled receptors and thioesterases.
 CC
      The present sequence is a peptide encoded by one such oligonucleotide.
 CC
```

```
The oligonucleotides and the peptides encoded by them may be used in the
CC
    prevention, diagnosis and treatment of diseases associated with
CC
    inappropriate expression of the proteins listed above. Disorders that may
CC
    be prevented, diagnosed and/or treated include multifactorial diseases
CC
    with a genetic component, such as autoimmune diseases (e.g. rheumatoid
CC
    arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus
CC
    and Grave's disease), inflammation, cancer (e.g. cancers of the bladder,
CC
    brain, breast, colon and kidney, leukaemia), diseases of the nervous
CC
    system and an infection of pathogenic organisms
CC
XX
     Sequence 14 AA;
SQ
                         95.5%; Score 21; DB 4; Length 14;
  Query Match
  Best Local Similarity 80.0%; Pred. No. 95;
                                                  1; Indels 0; Gaps
                                                                            0;
          4; Conservative 0; Mismatches
           1 FXGLM 5
Qу
             1 111
           9 FSGLM 13
Db
```

Search completed: April 7, 2004, 09:24:58

Job time : 75 secs